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Editorial

Health informatics professionalism in primary care

Glyn Hayes
President, Primary Health Care Specialist Group of the British Computer Society, Worcester, UK

The profession of 'health informatician'

Health Informatics has been defined as 'the knowledge, skills and tools which enable information to be collected, managed, used and shared to support the delivery of health care and promote health'.

However, the profession of 'health informatician' is a new, diverse and as yet unorganised entity. Does it have any relevance in primary care? This broad church includes many people working in health care, many of whom in the past would not have considered themselves part of one profession. These include full-time health informatics professionals, such as information and communication technology (ICT) staff, health records staff, knowledge management staff, information management staff, senior managers, directors of services and clinical informatics staff. It also includes other health professionals who have a major involvement in health informatics, such as managers, clinicians and administrative staff.

So what? Are these people really relevant to health care or are they just another grouping of health administrators and managers?

Most of the readers of this journal will require little convincing that the good application of computer technology in medicine (health informatics) has a profound effect on patient care and this is extending on a daily basis. The electronic medical record (EMR) has been shown to increase significantly the care patients receive by the use of automated alerts, and so on. Just as importantly, the appropriate use of the EMR has been shown to reduce vastly patient damage and cost by preventing medical errors.

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It may be thought that the situation in United Kingdom (UK) primary care is so well developed that there is no need for such experts. We have nearly 100% of general practitioner (GP) practices using computers. Over 80% of GPs use their clinical system while consulting with patients. Over 90% of all prescriptions in UK general practice are computer-generated. This latter fact is very important as it means that over 90% of medication items have been checked by the computer systems and possible risks due to interactions and contraindications have been shown to the prescriber.

However, we are now facing primary care team-wide systems, communications between GP systems, communications between GPs and hospitals, electronic transfer of prescriptions, care shared between different health sectors and much more. Also the growing demand for data to drive health care means an ever-increasing need for people who understand data and information. The Knowledge Revolution means that no clinician can keep up with changes in their field. They need access to appropriate knowledge, validated and available at the appropriate time. This needs staff to understand and deliver appropriate knowledge to those who provide care.

UKCHIP

It is to meet this demand that an organisation has been set up to accredit such staff and ensure they are trained appropriately and have ongoing professional development and behaviour. Called the UK Council for Health Informatics Professionals (UKCHIP), it is a professional registration body with the same basic functions as the General Medical Council (GMC) has for doctors.

UKCHIP's purpose is to develop a credible, valued health informatics profession for the benefit of patients and those working in the field. The most important phrase here is 'for the benefit of patients'. A profession's prime purpose is to protect its customers. Thus protection of patients is the prime role of UKCHIP. In doing so it protects and develops health informaticians.

UKCHIP's primary function is to hold a register of those who have been accredited as health informaticians. It will also de-register any registrants who fail to maintain adequate professional standards. To do this it will establish standards for professional conduct, qualification and development of health

informaticians. This will include a continuing professional development scheme for all in health informatics. Initially registration will be voluntary, although in the future the National Health Service (NHS) will expect anyone working in health informatics to have obtained registration. Eventually it is envisaged that statutory registration will be needed to protect the needs of patients.

Why is it needed?

The Council has been established following a growing consensus that there is a need to develop health informatics as an independent profession. It is becoming clear that, as informatics becomes an increasingly important part of health care, it is having greater and greater impact on patient care. There have been examples where poor health informatics has caused damage to patients. It is recognised that good informatics can improve patient care. These conflicting issues mean that there needs to be a means of ensuring that all of those concerned with health informatics have appropriate qualifications, expertise and experience. Thus there is a need for a professional registration body. It is also recognised that health informaticians are often undervalued, inappropriately managed and poorly paid. The establishment of good professional standards will help to improve this situation.

Aims and objectives

UKCHIP's aim is 'to promote and advance, for the benefit of the public, standards of practice in health informatics in the UK', and its objectives are to:

- act as a professional body representing all branches of health informatics in the UK
- promote, advance and encourage the study and practice of the application of informatics in the promotion of health, well-being and dying with dignity
- establish, uphold and improve the standards of qualification, training, competence and conduct of health informaticians in the UK
- establish mechanisms for the benefit and protection of the public
- work with official bodies on matters relating to the above.

UKCHIP is not a replacement for any existing organisation. It intends to work with others in the field. Thus the medical Royal Colleges, the British Computer Society, ASSIST (the association for ICT professionals in the NHS) and many others are helping to develop UKCHIP.

It is not a body to cater for those who use IT in their everyday work only as a tool. Thus most GPs and their staff should not be involved. There are other bodies concerned with helping them develop their use of IT, such as the Primary Health Care Specialist Group itself.[1] However, anyone whose work significantly involves developing, implementing and managing IT systems should get involved. This includes PCT IT leads and other PCT staff working in IT. It is only when such people have the relevant skills that we will have appropriate IT in primary care.

To contact UKCHIP, email: ukchipadmin@nhsia.nhs.uk or register on the website: www.ukchip.org

How relevant are health informaticians in providing health care?

It is a generally accepted truism that data are useless by themselves. They need to be collated, analysed and assessed. Only then can they be considered information. Thus the numbers of patients in a trial who have improved life expectancy on statins must be compared with other trial data, analysed to ensure statistical relevance and assessed in terms of the details of the trial itself. Thus we come up with information about the best treatment of heart disease in relation to statin use. However, it is dangerous to leave it here.

Treatment policy based on information may be better than that based on speculation but it does not take into account a broader picture. The Coronary Heart Disease National Service Framework (NSF), based on trial information, required all patients at risk to have their cholesterol level checked, and if it was over a certain figure the patient should be put on statins. In practice, this proved to be the wrong procedure, and the NSF had to be changed to propose that all patients with a coronary risk were put on statins anyway, without the need for cholesterol measurement. The information had to be developed, based on broader factors such as wider sources of information, pragmatic requirements of healthcare delivery and the experience of those working in the field internationally. Only then could it be described as the knowledge of best practice for preventing coronary heart disease. Only then would it be described as taking into account all the multiple factors which constitute knowledge. However, this then leaves a huge gap.

Knowledge is the best we can do in describing how a population should be managed in any set of circumstances. It requires large amounts of data, essential processing into information and large-scale collation

into a presentable form. All this can be done by technology and people who understand the technology, the underlying principles of informatics and the environment in which it will be used. This is the realm of the health informatician. But there is a further step that is usually forgotten by planners and policy makers. This step underlies the failure of so much of health policy.

DATA → INFORMATION → KNOWLEDGE → WISDOM

The way in which that knowledge is used determines the effectiveness of its impact. What is required is wisdom to use that knowledge appropriately with an individual patient. This cannot be done by technology or statistics. It requires experienced and motivated healthcare professionals who can use the knowledge to do the best for that patient. The mindless imposition of knowledge, which will always change as the scientific understanding grows, cannot provide the best for a patient. Sometimes best practice is right for an individual, sometimes it is not. At its simplest level, the prescribing of a statin to a patient who is allergic to the drug is bad medicine, even if performance management says all should be taking them.

We need health informaticians to develop all the steps that create knowledge. We also need them to understand the vital steps that convert this knowledge into wisdom.

REFERENCE

1 Primary Health Care Specialist Group (PHCSG): www.phcsg.org

ADDRESS FOR CORRESPONDENCE

Dr Glyn Hayes
3 Beech Avenue North
Worcester WR3 8PX
UK
Tel: +44 (0)1905 754268
Fax: +44 (0)1905 456817
Email: glyn@conline.demon.co.uk